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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,515

09/20/2005

Tomoko Nakamura

125397

1897

25944 7590 07/03/2008  
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EXAMINER

KOPEC, MARK T

ART UNIT

PAPER NUMBER

1796

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DELIVERY MODE

07/03/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/549,515	<b>Applicant(s)</b> NAKAMURA ET AL.	
	<b>Examiner</b> Mark Kopec	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/20/05</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

This application is a 371 of PCT/JP04/04178 (filed 03/25/04). The preliminary amendment filed 09/20/05 is entered. Claims 1-10 are pending.

The IDS filed 09/20/05 has been considered.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 11/727,111. Although the conflicting claims are not identical, they are not patentably distinct from each other because both

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the instant claims and the above listed claims are drawn to electrode paste(s) comprising electrode material powder and polyvinyl butyral and/or polyvinyl acetyl resin (and solvent). The instant claims are merely broader in scope (encompass) the copending claims in failing to recite the specific structure of butyral and acetyl.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the

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differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6, 9-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either JP 09-282941 or JP 2000-076930.

JP '941 discloses a conductive paste comprising spherical metal grains, organic binder and solvent (Abstract). The reference specifies polyvinyl butyral resin and organic solvent within the claimed ratio(s) (claims 1-3; para 0018 of translation; Table 1). The reference specifically or inherently meets each of the claimed limitations.

JP '930 discloses a conductive paste for internal electrode of laminated ceramic. The paste comprises metal powder, surfactant, resin and solvent (para 0020-0022; 0024-0030). The reference specifies polyvinyl butyral (0026; 0075), and discloses ranges of components which overlap with the ranges instantly claimed. The reference specifically or inherently meets each of the claimed limitations.

The references are anticipatory.

In the event that any minor modifications are necessary to meet the claimed limitations, such as minor variation in weight percent or addition of a particular ceramic, such modifications are well within the purview of the skilled artisan.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 09-282941 or JP 2000-076930.

Both JP 09-282941 and JP 2000-076930 are relied upon as set forth above. The references differ from instant claims 7 and 8 in failing to specifically disclose the claimed polymerization/acetylation amount.

The examiner submits that the optimization of such variables is well known in the art. The skilled artisan is well aware that varying polymerization/acetylation degree(s) of binder materials in order to tailor properties of the final paste is within the purview of the skilled artisan.

Claims 1-6, 9-10 are rejected under 35 U.S.C. 102(b)/(e)) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either Mukuno et al (6,494,931) or Hayashi et al (2001/0018116).

Initially, note that Mukuno is available under 102(e)/103 only.

Mukuno discloses nickel powder and conductive paste. The reference disclose the formation of inner electrode layers (Col 1, lines 20-25; examples), and specifies conductive paste compositions containing polyvinyl butyral resin and solvent within the claimed proportions (Col 7, lines 42-59; Col 8, lines 38-50). The reference specifically or inherently meets each of the claimed limitations.

Hayashi discloses nickel powder and conductive paste containing such (Abstract). The reference disclose the formation of inner electrode layers (Abstract; examples), and specifies conductive paste compositions containing polyvinyl butyral resin and solvent within the claimed proportions (0028-0031; 0045; 0060). The reference specifically or inherently meets each of the claimed limitations.

The examiner submits that the optimization of such variables is well known in the art. The skilled artisan is well aware that varying polymerization/acetylation degree(s) of binder materials in order to tailor properties of the final paste is within the purview of the skilled artisan.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukuno et al (6,494,931) or Hayashi et al (2001/0018116).

Both Mukuno et al (6,494,931) and Hayashi et al (2001/0018116) are relied upon as set forth above. The references differ from instant claims 7 and 8 in failing to specifically disclose the claimed polymerization/acetylation amount.

The examiner submits that the optimization of such variables is well known in the art. The skilled artisan is well aware that varying polymerization/acetylation degree(s) of



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binder materials in order to tailor properties of the final paste is within the purview of the skilled artisan.

In view of the foregoing, the above claims have failed to patentably distinguish over the applied art.

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Kopec whose telephone number is (571) 272-1319. The examiner can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Kopec/  
Primary Examiner, Art Unit  
1796

MK  
July 1, 2008